

Editorial

Introduction to special volume of Discrete Applied Mathematics

The rapidly developing and crucially important field of data mining has generated much activity and interest in recent years among mathematicians, computer scientists, and those working in the many application areas that involve the analysis of large amounts of data. Among the major mathematical tools that find powerful applications in data mining are those of discrete mathematics.

Many areas of discrete mathematics provide natural techniques for investigating a number of topics in the broad area of data mining, such as data classification, feature selection, clustering, frequent set generation, databases and their representations, data cleaning, and the analysis of algorithms used in data mining.

This volume brings together a selection of papers establishing links between data mining a number of areas of discrete mathematics, including graph theory, Boolean functions, lattices and partially ordered sets, discrete optimization methods, discrete probability theory, coding theory, and computational complexity.

A second volume on Discrete Mathematics and Data Mining is currently in the final stages of the editorial process and it is intended that such volumes will continue to be published regularly. We hope that this volume and those that will follow will stimulate further research at the interface of data mining and discrete mathematics.

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